

WHAT IS CLAIMED IS:

1. A method to forming a film, comprising:
 converting and creating a material in pseudo-molecular ions of a vapor state;
 and
 setting potentials of a plurality of electrodes disposed above a substrate to predetermined values and selectively sticking the pseudo-molecular ions to the substrate.
2. A method of manufacturing an electronic device in which a functional material is converted into thin films and layered on a substrate including a plurality of electrodes, the method comprising:
 altering a solution including the functional material into minute or fine liquid droplets and ionizing or charging the liquid droplets, and then creating pseudo-molecular ions of a vapor state by vaporizing the liquid droplets;
 reducing the content of solvent ions originated from a solvent included in the solution from the pseudo-molecular ions; and
 selectively setting potentials of a plurality of electrodes to different potentials for the pseudo-molecular ions, and selectively sticking pseudo-molecular ions of the functional materials to the substrate.
3. The method of manufacturing an electronic device according to claim 2, further comprising:
 separating the solvent ions and functional material ions originated from the functional material from the pseudo-molecular ions, and reciprocally deflecting the functional material ions.
4. The method of manufacturing an electronic device according to claim 2, the substrate having a plurality of electronic devices formed thereon, and the selective potential setting of the plurality of electrodes formed for each of the plurality of electronic devices are performed by signal lines and power supply lines that are commonly formed for the plurality of electronic devices.
5. The method of manufacturing an electronic device according to claim 4, the signal lines and the power supply lines that are commonly formed for the plurality of electronic devices formed on the substrate being wired in such a way as not to cross each other in middle regions between the electronic devices formed on the substrate.
6. The method of manufacturing an electronic device according to claim 2, setting circuits to selectively set predetermined potentials for the plurality of electrodes are formed in the formation regions of the electronic devices formed on the

substrate, and the setting circuits using at least one portion of original electronic circuits of the electronic devices formed in formation regions.

7. The method of manufacturing an electronic device according to claim 6, the electronic devices formed in the formation regions on the substrate being electro-optical devices, the plurality of electrodes being element electrodes of a plurality of electro-optical elements formed in the electro-optical devices, and the electronic circuits used in the setting circuits including element driving circuits of the electro-optical elements.

8. A film forming system to forming a film of a material on a substrate, comprising:

an ionizing unit, which alters the material or a solution of the material into minute liquid droplets, ionizes or charges the liquid droplets, vaporizes the liquid droplets, and creates pseudo-molecular ions of a vapor state;

a voltage supply unit, which supplies signals or voltages to electronic circuits that selectively set potentials of a plurality of electrodes included in the substrate for the pseudo-molecular ions; and

a film-forming unit, which sticks material ions included in the pseudo-molecular ions to the substrate.

9. The film forming system according to claim 8, further comprising:

a solution supplying unit, which supplies a solution obtained by mixing the material and a solvent to the ionizing unit;

a gas supplying unit, which alters the solution into minute liquid droplets by simultaneously ejecting the solution and an inert gas from nozzles; and

a separating unit, which creates the pseudo-molecular ions of a vapor state by vaporizing the minute liquid droplets and separates functional material ions originated from the functional material and solvent ions originated from the solvent from the pseudo-molecular ions.

10. The film forming system according to claim 9, further comprising:

a deflecting unit that reciprocally deflects the functional material ions originated from the functional material and separated by the separating unit.

11. The film forming system according to claim 9,

the separating unit including a mass separating unit having a plurality of electrodes to separate the functional material ions originated from the functional material by using mass of ions according to an applied voltage or current .

12. The film forming system according to claim 11,

the mass separating unit including a plurality of mass separating units where distances between the plurality of electrodes are different from each unit.

13. The film forming system according to claim 8,
collector electrodes being provided and adjusting electrodes that adjust the flying speed of the ions originated from the material being provided between the collector electrodes and the film-forming unit.
14. The film forming system according to claim 8, further comprising:
a detecting unit that detects the amount of the functional material ions stuck to predetermined electrodes of the substrate.
15. The film forming system according to any claim 8,
an ion-sticked electrode surface of the substrate being positioned vertically or horizontally downwardly and the substrate being slidable.
16. The film forming system according to claim 8,
the ionizing unit, the separating unit, and the film-forming unit include an isolating device for independently decompressing.
17. An electronic device manufactured using the method of manufacturing an electronic device according to claim 2.
18. An electronic apparatus, comprising:
the electronic device according to claim 17.
19. An electronic device manufactured using the film forming system according to claim 8.
20. The film forming system according to claim 9,
collector electrodes being provided and adjusting electrodes that adjust the flying speed of the ions originated from the material being provided between the collector electrodes and the film-forming unit.
21. An electronic device manufactured using the film forming system according to claim 9.
22. An electronic device manufactured using the film forming system according to claim 11.
23. An electronic device manufactured using the film forming system according to claim 13.